	Application No.	Applicant(s)	
Notice of Allowability	Application No.	Application	
	10/649,954	CHOI, TAE-KYU	
nouse of Allowability	Examiner	Art Unit	
	Huedung X. Cao	2821	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate committee (GHTS). This application is	n this application. If not included unication will be mailed in due course	
1. This communication is responsive to <u>amendment, filed on</u>	<u>11/18/05</u> .		
2. The allowed claim(s) is/are <u>8-11,14-21 and 24-26</u> .			
 3. Acknowledgment is made of a claim for foreign priority unally All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been received in Application	on No	om the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirem	nents
4. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give			E OF
 5. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the deponsal of t	son's Patent Drawing Review s Amendment / Comment on .84(c)) should be written on the header according to 37 CF sit of BIOLOGICAL MATI	in the Office action of the drawings in the front (not the back) R 1.121(d). ERIAL must be submitted. Note the	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 12/06/05 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material Supervisory Patent Examiner Technology Center 2869	6. ☐ Interview S Paper No./ 98), 7. ☑ Examiner's	formal Patent Application (PTO-152) ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance -	

Application/Control Number: 10/649,954

Art Unit: 2821

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Page 2

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel Y.J. Kim (Registration No.36,186) on 01/30/2006.

The application has been amended as follows:

Please cancel claim 22.

In claim 8: An [active] antenna system of a radio communication terminal comprising:

an antenna that transmits and receives a communication signal to and from a communication node;

a sending end amplifying/filtering unit that amplifies and filters the communication signal to be transmitted through a duplexer;

a receiving end amplifying/filtering unit that amplifies and filters the communication signal received through a duplexer;

a closed loop control circuit that generates a control signal according to power of a communication signal output from sending end amplifying/filtering unit; and

a bias unit that separated the communication signal and a power transmitted from a radio communication terminal through a transmission line,

wherein the receiving end amplifying/filtering unit includes a variable amplifier that amplifies a reception communication signal as much as a variable gain according to a control signal, and

wherein the closed loop control circuit comprises:

a coupling unit that branches a transmission output from a final end of the sending end amplifying/filtering unit; and

a detection controller that generates a control signal according to a strength of power of the branched transmission output and applying the control signal to the variable gain amplifier.

Examiner's Statement of Reasons for Allowance

- 1. Claims 8-11, 14-21, and 24-26 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

The prior art made of record fails to anticipate or make obvious the claimed invention. Specifically, the prior art fails to teach, in combination with the remaining elements as recited in claims 8, 15, and 24:

The present invention is directed to an active antenna system of radioa communication terminal dielectric resonator package.

Application/Control Number: 10/649,954

Art Unit: 2821

Regarding claims 8, 15, and 24, the Prior Art fails to teach that, the receiving end amplifying/filtering unit includes a variable amplifier that amplifies a reception RF signal as much as a variable gain according to a control signal, where a closed loop control circuit comprises a coupling unit that branches a transmission output from a final end of the sending end amplifying/filtering unit; and a detection controller that generates a control signal according to a strength of power of the branched transmission output and applying the control signal to the variable gain amplifier, and a bias unit that separates the communication signal, a power and a control signal transmitted from the radio communication terminal through a transmission line, and wherein the control signal is applied to at least one of the sending and receiving end

Page 4

Claims 9-11, 14, and 21 are allowed for depending on claim 8.

Claims 16-20 are allowed for depending on claim 15.

amplifying/filtering units to adjust a corresponding amplifier gain.

Claims 25-26 are allowed for depending on claim 24.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/649,954

Art Unit: 2821

Inquiries

Page 5

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Huedung Cao whose telephone number is (571) 272-

1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao Patent Examiner

Supervisory Patent Examiner

Technology Center 2800